

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-13 (Cancelled).

14. (New) A method for improving transmission control protocol (TCP) performance of a communication network wherein a receiver receives a plurality of packets each having a header comprising an address and a sequence number, said method comprising the steps of:

identifying at least one received packet having a bit error; and
if all packets for a window size are received, sending a selective acknowledgement indicating that said at least one received packet has a bit error and suppressing duplicate acknowledgements.

15. (New) The method of claim 14, further comprising the step of:
constructing the selective acknowledgment having a plurality of acknowledgment bits, each acknowledgment bit corresponding to a respective packets for said window size.

16. (New) The method of claim 15, wherein said constructing step further comprises the steps of:
for each of said at least one identified packets having a bit error, assigning an error value to a corresponding acknowledgment bit in said selective acknowledgment;
and
for each of said received packets for the window size not having a bit error, assigning a no-error value to a corresponding acknowledgement bit in said selective acknowledgment.

17. (New) The method of claim 16 wherein said constructing step further comprises the step of:

for each packet for the window size not received, assigning an error value to a corresponding acknowledgment bit in said selective acknowledgment.

18. (New) The method of claim 14 further comprising the step of:

sending duplicate selective acknowledgments if all packets for a window size are not received.

19. (New) A method for controlling transmission performance in a communication network having a base station relaying a plurality of packets to a receiver, each of said packets having a payload without error correction bits and a header comprising an address and a sequence number, said header having error correction bits, said method comprising the steps of:

identifying a received packet having a bit error;

determining whether said bit error occurs within a packet header of said received packet; and

correcting said bit error if the bit error occurs within said packet header.

20. (New) The method of claim 19 further comprising the step of:

marking said first packet as received in error if the bit error does not occur within said packet header.

21. (New) A method for providing transport protocol within a communication network having a receiver receiving a plurality of packets, said method comprising:

determining a non-congestion bit error for at least one packet from the plurality of packets; and

sending a selective acknowledgment associated with said at least one packet having a non-congestion bit error without invoking a congestion control mechanism.

22. (New) The method of claim 21, further comprising the steps of:

determining a congestion bit error for at least a second packet from the plurality of packets; and

sending a plurality of duplicate acknowledgments associated with said second packet having a congestion bit error.

23. (New) The method of claim 22, further comprising the step of invoking a congestion control mechanism.

24. (New) The method of claim 21 wherein said selective acknowledgment comprises a plurality of bits indicating a status of an associated plurality of packets.

25. (New) The method of claim 24 wherein each of said plurality of bits corresponds to a sequence number of a packet from the plurality of packets, each bit having one value from the group of a first value indicating a packet was received with an error or a packet was not received, and a second value indicating a packet was received without an error.

26. (New) A program storage device readable by a machine, tangibly embodying a program of executable program instructions to perform a method for improving transmission control protocol (TCP) performance of a communication network wherein a receiver receiving a plurality of packets each having a header comprising an address and a sequence number, said method comprising the steps of:

identifying at least one received packet having a bit error; and

if all packets for a window size are received, sending a selective acknowledgement indicating that said at least one received packet has a bit error and suppressing duplicate acknowledgments.

27. (New) A program storage device readable by a machine, tangibly embodying a program of executable instructions to perform a method for providing transport protocol

within a communication network having a receiver receiving a plurality of packets, said method comprising:

determining a non-congestion bit error, for at least one packet from the plurality of packets; and

sending a selective acknowledgement associated said at least one packet having a non-congestion bit error without invoking a congestion control mechanism.

28. (New) A method for improving transmission control protocol (TCP) performance of a communication network comprising the steps of:
transmitting a plurality of packets to a receiver; and
receiving a selective acknowledgement indicating that at least one received packet was identified as having a bit error by said receiver.

29. (New) The method of claim 28 wherein said received selective acknowledgment comprises a plurality of acknowledgment bits, each acknowledgment bit corresponding to a respective packet for a window size.

30. (New) The method of claim 29 wherein a first value of an acknowledgment bit identifies a respective packet as having a bit error and a second value of an acknowledgment bit identifies a respective packet as not having a bit error.

31. (New) A method for improving transmission control protocol (TCP) performance of a communication network comprising the steps of:
transmitting a plurality of packets to a receiver; and
receiving a selective acknowledgement associated with at least one packet having a non-congestion bit error and not invoking a congestion control mechanism.

32. (New) The method of claim 31 wherein said selective acknowledgment comprises a plurality of bits indicating a status of an associated plurality of packets.

33. (New) The method of claim 32 wherein each of said plurality of bits corresponds to a sequence number of a packet from the plurality of packets, each bit having one value from the group of a first value indicating a packet was received with an error or a packet was not received, and a second value indicating a packet was received without an error.